Case Report

A Case report of disseminated tuberculosis in an 8 month old child with disseminated calcification

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Abstract

We are presenting a case of 8 month old child admitted in pediatric ward with fever, cough, failure to thrive and increased frequency of stool, chest x-ray was having milliary opacity and calcified lymph nodes, ultrasonography showing hepatosplenomegaly with multiple calcifications and MRI Brain was also having multiple calcifications. Patient was treated with ATT and followed up regularly.

Introduction

Tubercle bacilli are disseminated to distant sites including liver, skin lung and CNS (1). The most significant form of disseminated tuberculosis is milliary disease, which occurs when massive numbers of tubercle bacilli are released into bloodstream causing disease to 2 or more organs. It leads to calcifications.

Case report

Informant was a mother of 8 month old Hindu female child coming from lower social economic class residing at Vejalpur, Ahmedabad, admitted with complaints of fever for 8 months, low grade, on and off; increased frequency of stool for 2 months; not gaining weight for 2 months and vomiting for 20 days.

Child was admitted many times in past at that time some IV injection and oral medication was given. Family history of tuberculosis to grandfather was present. Child was full term caesarean section delivered with birth weight of 3 kg without perinatal complications. Child is immunized for age and delayed development was present with developmental quotient of 40%.

On examination:

On clinical examination: Temperature- normal, HR- 110/min, RR- 32/min, SpO2 98% in air, BP 90/62mmHg. Weight 4.2kg (against expected of 11.5 less than -3 SD); head circumferences 39 cm (no microcephaly); Height- 63cm (stunting grade-2). Mid arm circumference was 9.5 cm (severe malnutrition).

On general examination:

Spars hair, pallor and clubbing was present. Wasting of muscle and loss of subcutaneous fat with baggy pant appearance was present (except from cheek). On systemic examination in respiratory system-bilateral crepitations was present and on per abdominal examination liver was enlarged +5 cm with firm in consistency ,sharp margin, granular surface, non tender and spleen was enlarge +3cm with firm in consistency. Other system examination was within normal limit.

Investigation and treatment:

Hb 8.6; TC13400; APC 2.4; chest x-ray was suggestive of bilateral granular opacity suggestive of milliary koch’s (see figure 1), Ultrasonography abdomen was suggestive of hepatosplenomegaly with multiple calcifications within it. CSF examination was normal; MT was negative, gastric aspirate for AFB was negative. MRI brain was showing calcifications. Patient was treated with Antitubercular treatment.

Follow up

On regular follow up, patient responded well and in three months child’s general condition was improved, weight gain was present, developmental mile stones was improved and no any readmission required.

Summary

Diagnosis of disseminated tuberculosis can be difficult and a high index of suspicion is required.
The resolution of miliary tuberculosis is slow, even with proper therapy. Fever usually declines within 2-3 weeks of starting ATT, but chest radiographic abnormalities might not resolve for many months. The appearance of calcifications implies that the lesion must be present for at least 6-12 months. The prognosis is excellent if diagnosis is made early and adequate chemotherapy is given. We should like to re-emphasize the need to consider disseminated tuberculosis early in differential diagnosis of a wasting pyrexial illness with chest symptoms and signs.³

References
2. The essentials of Tuberculosis, by Dr Vimlesh Sheth